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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Allocation of Spectrum Below) ET Docket No. 94-32
5 GHz Transferred from Federal)
Government Use)
)

To: The Commission

REPLY COMMENTS
OF THE
INDUSTRIAL TELECOMMUNICATIONS ASSOCIATION, INC.

1. The Industrial Telecommunications Association, Inc. (ITA) pursuant to the Federal Communications Commission's Notice of Proposed Rule Making in the above referenced matter, hereby respectfully submits these Reply Comments in response to other Comments previously filed in this proceeding.

2. Other commenters overwhelmingly agreed that the Commission has abdicated its spectrum management responsibilities in choosing to auction the former government spectrum allocation for a vague category, such as "fixed and mobile purposes." Indeed, ITA believes the NPRM violated the letter and spirit of the 1993 legislation authorizing the FCC to conduct auctions. The proposal to implement auctions precludes the possibility of a private emerging technology allocation.

3. ITA called the market-based flexible allocation

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"defective from both a legal and practical perspective." The combination of spectrum auctions and the use of a flexible allocation that relies on market forces goes against Congress' will as expressed in the Omnibus Budget Reconciliation Act of 1993, where it recognized that auctions do not provide a valid assignment mechanism for all uses of radio spectrum.

4. ITA also noted that an alliance with broad industry support, the Coalition of Private Users of Emerging Multimedia Technologies, has petitioned the Commission for 75 megahertz of spectrum to support privately operated, internal-use emerging technology systems.¹ This spectrum would accommodate needs for advanced wireless imaging and wireless, remote-file-access systems.

5. The Manufacturers Radio Frequency Advisory Committee, Inc. (MRFAC) called the fixed and mobile allocation "generic." The FCC's allocation raises "fundamental questions as to whether the agency [is] fulfilling its statutory mandate to regulate the radio spectrum in the public interest," MRFAC said.

6. The Utilities Telecommunications Council (UTC) said the allocation was "inconsistent with sound spectrum management" and criticized the Commission for failing to make an analysis of the

¹Petition for Rule Making of the Coalition of Private Users of Emerging Multimedia Technologies ("COPE"), at 1 (Dec. 23, 1993). *See In re Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use, Notice of Inquiry*, ET Docket No. 94-32, 9 FCC Rcd. 2175, 2177 n.21 (1994).

public interest between competing uses of the spectrum. "The FCC's proposal permits no weighing of the public interest benefits of various services. For the FCC to engage in any rational assessment of the net public interest in allocating these bands, it must first be able to identify the proposed services," UTC said.

7. MRFAC quoted Senator Daniel K. Inouye (D-HI) to show that auction authority was not intended by the Congress to usurp traditional radio service allocations. "It is time to give the concept of spectrum auctions a trial. This proposal does not, however, allow auctions to be used to allocate frequencies among different service categories. The frequency allocation decision must continue to be made by the FCC, not by the private marketplace." – Statement of Senator Inouye from the Congressional Record.

8. The Association of Public-Safety Communications Officials International (APCO) agreed with ITA, MRFAC, UTC and others, calling the allocation "extremely broad...The end result is allocation by auction, since almost any spectrum use will be permitted. The use of the spectrum will be determined by the highest bidders."

I. Auctions Negate Action on COPE Petition

9. Because the FCC is prohibited from auctioning private

spectrum, the auction proposal for all intents and purposes shuts the door on thousands of companies that need emerging technologies to meet internal communications requirements. The FCC's invitation for private users to compete against subscriber-based communications services for spectrum is simply not realistic.

10. MRFAC noted, emphatically, "In short, even if manufacturers could compete in auctions with carriers - a questionable notion - the Commission's failure to recognize the importance of privately licensed radio systems to productivity and safety is disturbing."

11. In its Comments, Motorola notes that while many of the emerging technologies now exist, new product development is being constrained by the lack of available spectrum. Therefore, according to Motorola, the advanced private land mobile communications articulated in the COPE petition should be a high priority for the FCC as it reallocates government spectrum.

12. "In the near future, law enforcement officials will have access to a host of high-speed data applications, including the ability to transmit and receive fingerprints, mug shots, maps and floor layouts. Similar developments will be implemented in the areas of energy conservation and management, emergency response and rescue, health care, and pollution control," Motorola said.

13. The Los Angeles County Sheriff's Department notes, sadly, that viewers nationwide via broadcast television were treated to live overhead views of the O.J. Simpson pursuit by law enforcement personnel and coverage of the Los Angeles earthquake aftermath. But the County, itself, does not have the ability to transmit live video from aircraft to command centers on the ground.

14. "These bands could help to satisfy an important immediate need for dedicated public safety video communication channels, especially for airborne video operations," the L.A. County said. "Having a birds-eye view of the situation would greatly facilitate the ability of the Sheriff's Department and other public safety agencies to respond to such emergencies [as earthquakes, wildfires and civil disturbances]."

15. The Personal Communications Industry Association (PCIA) pointed out several applications for video transmission technologies for railroads. "(1) Remote observation by railroad and regulatory officials of a derailment site during restoration...and of a hazardous material clean up. (2) Remote observation of terminal and yard operations...to improve the efficiency of train make-up and yard operations. (3) Provide one-person train operations by allowing the engineer to manipulate the train movement remotely by means of radio control."

II. Commercial Services Providers Cannot

Meet All Communications Needs

16. In its NPRM, the FCC dismisses the spectrum needs of the private land mobile radio community, claiming that private users can merely obtain the needed services from a local commercial service provider. Commenters agreed that the degree of coverage, reliability and security demanded by private users cannot be met by commercial service providers, including personal communications services.

17. "Private users...cannot simply take service from 'commercial service providers...' MRFAC said. "Their operations -- including just-in-time delivery of components to the assembly line, inventory control, materials handling, and security and fire protection, for example -- demand radio systems under the exclusive control of the licensee." Motorola added: "Furthermore, many of the emerging multimedia services discussed in the COPE petition require greater bandwidth than is available in existing private allocations or likely to be made available by commercial service providers."

18. The communications needs of each industry and each company are very specialized. To quote Janet Ernest of Motorola, who spoke at ITA's 1994 Annual Conference, "If there was only one job to do in this country, we would need only one communications system. But a system designed for the railroads can no more meet

the needs of a utility system than if I was to give a new, fancy calculator to an artist and say, 'This is a brand-new calculator. It has everything you need. It is a wonderful tool. Here, it will meet all of your artistic needs. I'm the government, and I know that this is what you need.'"

19. PCIA's comments highlight three attributes of private networks that are essential to the communications of America's industries:

"(1) The private network can be customized, upgraded, and realigned as necessary to yield high performance at a reasonable infrastructure cost.

(2) The single user/operator can accommodate increased or seasonally erratic data traffic within his existing system, adding capacity in a step function, without incurring additional subscriber costs.

(3) Control of the network is in the hands of the system's owner/operator enabling swift reaction to coverage and capacity challenges, and special traffic requirements."

20. While commercial service providers build out their systems in the most heavily populated areas to maximize the number of subscribers, many companies operate in rural, sometimes isolated areas. It is difficult, if not impossible, for commercial service providers to attain the goal of universal service that covers all of the geographic area of the nation.

21. Even if coverage is available, as the Association of American Railroads notes, the reliability of commercial systems is not adequate for private, internal-use communications systems. "Typical commercial carrier systems are designed for peak loading levels which are substantially lower than the total number of possible users served. The effect of such limited capacity is that during major disasters - such as tornados, earthquakes, hurricanes and floods - the commercial systems become overloaded, resulting in a total disruption of service." Commercial carrier repair times are generally unacceptable for the safety of life and property that these communications systems protect.

III. Conclusion

22. The push to allow market forces to operate without artificial impediments has been one of the factors motivating the Commission's deregulatory efforts over the past decade. The only way the FCC can create a free market, however, is to allocate spectrum for a broad range of telecommunications services, thereby expanding the option available to users of the spectrum. Effecting the COPE petition would enrich the marketplace with communications options, making American businesses more productive and allowing them greater safety of life and property. The FCC has already provided commercial services providers with 220 megahertz of spectrum for PCS purposes. Now, it is time to round out the marketplace with a private spectrum allocation.

WHEREFORE, THE PREMISES CONSIDERED, The industrial Telecommunications Association, Inc. respectfully submits these Comments and urges the Federal Communications Commission to act in accordance with the views expressed herein.

INDUSTRIAL TELECOMMUNICATIONS
ASSOCIATION, INC.

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Date: January 6, 1995

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